



Intel® Processor

Product Lines



Desktop Intel® Processors



Intel® Pentium® 4 Processor

The **Intel® Pentium® 4 processor** is Intel's newest desktop processor family. The Pentium 4 processor features the Intel® NetBurst™ microarchitecture, which is based on a breakthrough technology and designed for balanced high performance. It offers scalability and headroom to accommodate the rapid expansion of tomorrow's Internet. Pentium 4 processor-based PCs are ideal for mainstream and performance-hungry users, at work, at home and at school.

- Frequencies up to 2.53 GHz
- Intel® NetBurst™ microarchitecture
- Hyper-pipelined technology
- 533 MHz or 400 MHz system bus¹
- Rapid Execution Engine
- 144 new instructions, including second-generation Streaming SIMD Extensions (SSE2)
- Supported by the Intel® 850 and 845 chipset families



Intel® Pentium® III Processor

The **Intel® Pentium® III processor** is a solid performer for entry-level business and consumer desktops. The Pentium III processor handles today's workload, with the versatility and compatibility to manage a broad range of applications in your e-Business or e-Home environment. Entry-level servers based on the Pentium III processor with 512K L2 cache can support up to 6 GB of memory. They are an excellent choice for single- and dual-processor server blades, compact servers for space- and power-sensitive environments.

- Frequencies up to 1.33 GHz for desktop; 1.40 GHz for server
- Integrated Level 2 cache (512K L2 cache or 256K Advanced Transfer Cache)
- 133 MHz or 100 MHz system bus
- Supported by the Intel® 810, 815, and 840 chipset families



Intel® Celeron® Processor

Designed for desktop Value PCs, the **Intel® Celeron® processor** offers exceptional value with all the dependability you expect from Intel. The Intel Celeron processor is a good choice for many everyday tasks, including word processing, e-mail, and browsing the Internet.

- Frequencies up to 1.30 GHz
- Integrated Level 2 cache (128K or 256K)
- 100 MHz system bus on processors with core frequency of 800 MHz and above; others have a 66 MHz system bus
- Supported by the Intel 810 and 815 chipset families



¹ The Intel Pentium 4 processor at 2.53 GHz, 2.40B GHz and 2.26 GHz have a 533 MHz system bus.

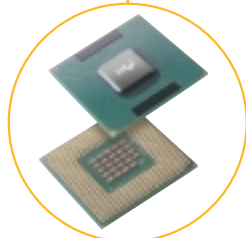
Mobile Product Lines



Mobile Intel® Pentium® 4 Processor – M

Built on 0.13-micron process technology and Intel® NetBurst™ microarchitecture, the **Mobile Intel® Pentium® 4 Processor - M** represents a new generation of mobile computing. It provides superior capabilities for graphics-intensive multimedia applications, and processor-intensive background computing tasks such as compression, encryption, and virus scanning. Enhanced Intel® SpeedStep™ technology helps to optimize application performance and power consumption, and Deeper Sleep Alert State, a dynamic power management mode, adjusts voltage during brief periods of inactivity – even between keystrokes – for longer battery life. Innovative Micro FCPGA packaging technology enables the processor to fit into small form factors, such as thin-and-light notebooks.

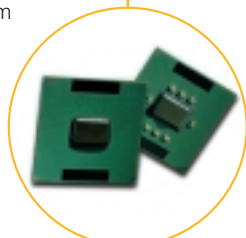
- Frequencies up to 1.80 GHz
- 0.13-micron process technology
- 400 MHz system bus
- 512K Level 2 cache
- Supports Enhanced Intel® SpeedStep™ technology and Deeper Sleep Alert State, to extend battery life
- 144 new instructions, including second-generation Streaming SIMD Extensions (SSE2) for accelerating video, multimedia, 3D, imaging and encryption
- Micro FCPGA package technology to enable thinner, lighter notebooks
- Supported by the Mobile Intel® 845 chipset family



Mobile Intel® Pentium® III Processor - M

The **Mobile Intel® Pentium® III Processor - M** offers mainstream performance for mobile users. It is built on the latest 0.13-micron process technology, to enable greater speeds and lower power consumption for long-lasting performance in thinner, lighter notebooks. Mobile Intel Pentium III Processor - M products are available in low-voltage and ultra-low voltage models, for mini- and sub-notebooks, as well as tablet PC platforms.

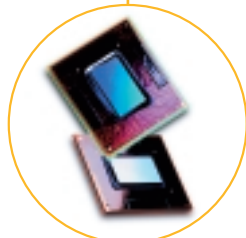
- Frequencies up to 1.20 GHz
- 0.13-micron process technology
- 133 MHz system bus
- 512K Level 2 cache
- Supports Enhanced Intel® SpeedStep™ technology and Deeper Sleep Alert State
- Micro FCPGA and FCBGA package technology
- Supported by the Mobile Intel® 830 chipset family



Mobile Intel® Celeron® Processor

The **Mobile Intel® Celeron® processor** offers responsive performance and exceptional value in mobile PCs for home and school. The Mobile Intel Celeron processor is a good choice for any time, anywhere computing.

- Frequencies up to 1.20 GHz
- 100 and 133 MHz system bus²
- 128K Level 2 cache
- Supported by the Intel® 440BX AGPset



² 133 MHz system bus is offered for Mobile Intel Celeron processors at 1.20 GHz, 933, 866, 800 and 733 MHz only.

Workstations/Servers



Intel® Itanium™ Processor

The 64-bit **Intel® Itanium™ processor** is the first processor in the Itanium processor family. The Intel Itanium architecture is based on Explicitly Parallel Instruction Computing (EPIIC) technology. This revolutionary new architecture combines increased memory and I/O bandwidth, instruction-level parallelism, massive register sets, large memory addressability (up to 16 TB) and world-class floating point and security transactions performance. The Intel Itanium processor delivers unprecedented performance and price/performance for targeted workstation and server applications.

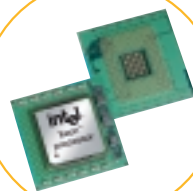
- Frequencies up to 800 MHz
- EPIIC (Explicitly Parallel Instruction Computing) technology to maximize parallelism
- Three levels of cache to reduce memory latency: 2MB or 4MB full speed Level 3 cache, 96K Level 2 cache, 32K Level 1 cache
- 266 MHz data bus
- IA-32 instruction binary compatibility in hardware
- Broad range of configurations; scales to 32+ processors
- Supported by the Intel® 460GX chipset



Intel® Xeon™ Processor Family for Servers

The **Intel® Xeon™ processor family for Servers** offers innovative server technologies such as Intel® NetBurst™ microarchitecture and Hyper-Threading technology. For multi-processor servers, the Intel Xeon processor MP also offers the first three-level cache architecture in a 32-bit server processor, for excellent performance and scalability on multi-threaded applications. These and many other innovations enable dual-processor and multi-processor servers to deliver performance, dependability, value, and versatility for anything from departmental server applications to enterprise and e-Business multi-processor applications.

- Frequencies up to 2.40 GHz (1.60 GHz for multi-processor servers)
- 400 MHz system bus
- Available in dual-processor, 4-way, 8-way, and greater than 8-way server configurations
- 256K Level 2 Advanced Transfer Cache for multi-processor servers; 512K cache for dual-processor servers
- Up to 1MB of Integrated Level 3 cache, for multi-processor servers
- Supported by the Intel® E7500 family of chipsets (for DP servers only)



Intel® Xeon™ Processor for Workstations

The **Intel® Xeon™ processor for Workstations** brings new levels of performance to dual-processor workstation platforms. Targeted application categories include: manufacturing, digital media, digital content creation, and financial analysis.

- Frequencies up to 2.40 GHz
- Intel® NetBurst™ microarchitecture
- 400 MHz system bus
- 512K on-die Level 2 Advanced Transfer Cache
- Dual-processor configurations for high-performance workstations
- Supported by the Intel® 860 chipset



Processors for Every Segment

As technology becomes increasingly central to our lives, the differences among users become more pronounced. That’s why Intel customizes its processors for specific market segments. Together with computer systems manufacturers throughout the world, Intel provides a broad range of choices for every computing need. All of today’s Intel® processors build on innovative technologies to deliver performance, compatibility, and reliability across a broad spectrum of computing needs:

- **Intel® Itanium™ processor**
for the highest levels of performance and scalability in 64-bit enterprise servers and workstations
- **Intel® Xeon™ processor**
for excellent performance in servers and workstations
- **Intel® Pentium® 4 processor**
for mainstream and performance-hungry business and home users and entry-level workstations
- **Mobile Intel® Pentium® 4 Processor - M**
for superior mobile performance in business and home computing
- **Intel® Pentium® III processor**
for solid performance in entry-level desktops, workstations, and servers
- **Mobile Intel® Pentium® III Processor - M**
for mainstream performance in anytime, anywhere computing
- **Intel® Celeron® processor**
for excellent value in desktop PCs and mobile PCs

	Intel® Itanium™ Processor	Intel® Xeon™ Processor	Intel® Pentium® 4 Processor	Mobile Intel® Pentium® 4 Processor-M	Intel® Pentium® III Processor	Mobile Intel® Pentium® III Processor-M	Intel® Celeron® Processor
Server	✓	✓			✓		
Workstation	✓	✓	✓		✓		
Desktop			✓		✓		✓
Mobile			✓	✓	✓	✓	✓

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